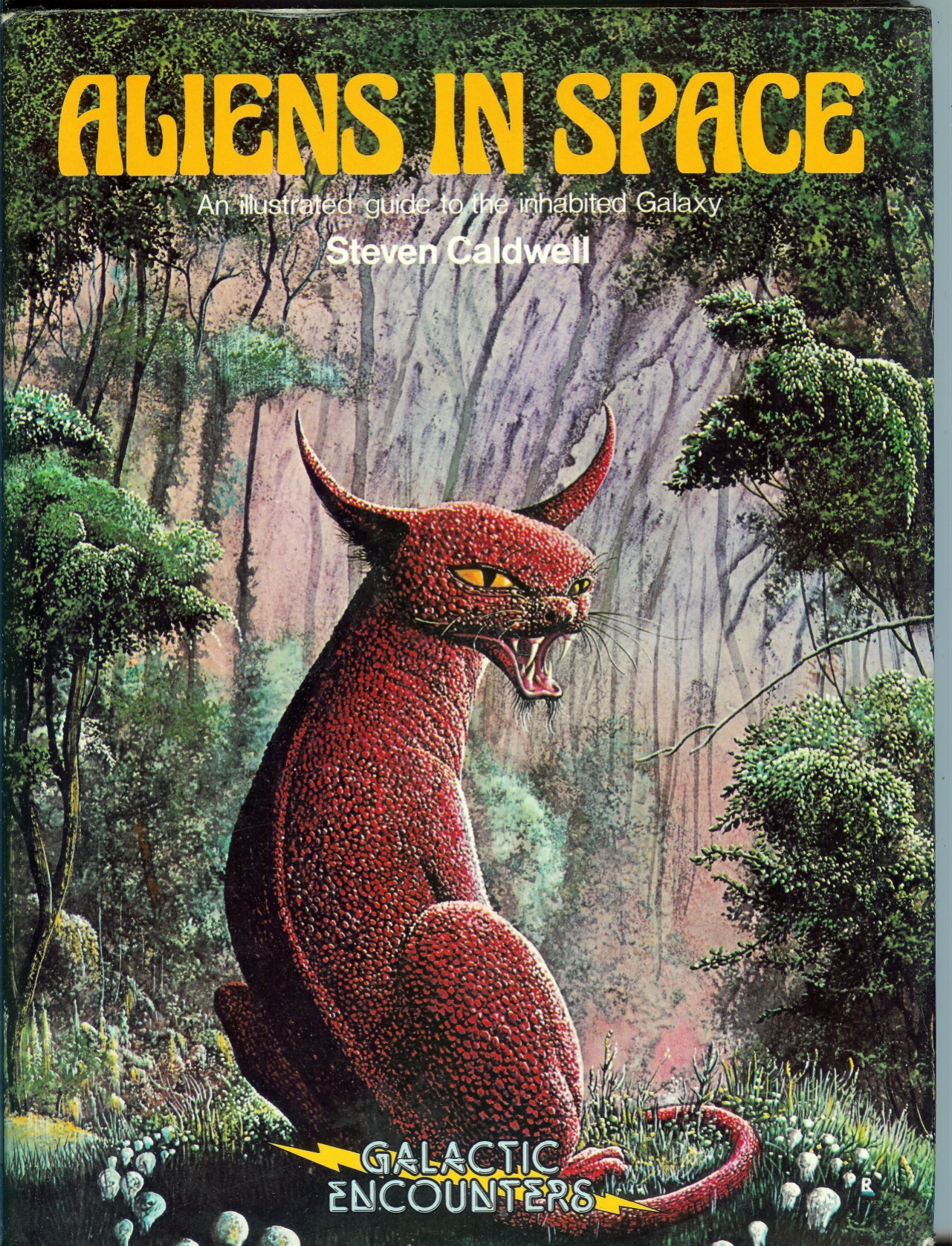
ALIENS IN SPACE

An illustrated guide to the inhabited Galaxy

Steven Caldwell



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Introduction

From the day when the first Earthman slipped into hyperspace and exceeded the speed of light, a new chapter in his evolutionary history began. As a direct result of this technological advance, he was faced with the realization that other forms of life existed among the stars. Of greater significance was that some of these were at least as advanced as he was—and in the case of the Magicians of Nova Nevada, were arguably more so.

From the early contact with the peoples of Alpha and Proxima Centauri sprang the seed of an association which was to grow into the Galactic Federation, and which now encompasses an area of interstellar space nearly six hundred light years across.

Hundreds, perhaps even thousands of planets circle their parent stars within the Federation's boundaries, many of them charted but yet to be fully explored.

Aliens in Space is a guide to all the intelligent life-forms encountered so far, and describes their characteristics, cultures and social patterns, and the worlds they inhabit. Many of these creatures appear strange or even grotesque to human eyes, but as we learn more about them and their view of us, the differences become less marked. There are now few humans who have travelled widely among the member planets who would be startled by the mere physical appearance of our alien colleagues.

For convenience this book has been divided into three main sections: Local Space, Distant Space and the Perimeter Worlds. Local Space is here defined as the area up to about one hundred light years away from our own solar system; Distant Space from one to two hundred light years, and the Perimeter Worlds being those situated in the furthermost regions of Federation influence.

Although there are many more occupied planets than are covered here, only ten are the homes of sentient life indigenous to their world. The many planets which have been colonized by Federation groups have been covered elsewhere and do not come within the scope of this book. This is also true of those that possess a lower order of creation where the abilities to reason or communicate have not been demonstrated. It is true that some of the species described here do not immediately seem to satisfy these criteria, but the potential exists once the means have been found to facilitate an effective exchange.

One thing is certain, however, and that is that the fascinating variety of life among the stars lying within the relatively tiny volume of Federation space suggests that our outward expansion will always be an interesting and rewarding one.

Environment Classes

Each inhabited planet is allocated a classification according to the general nature of its environment, and in addition to the main description, is given a numerical reference to indicate its position within the general category.

Class A Temperate Earth-type environment. Our own planet is Class A2.

Class B Moist, Tropical habitat with high humidity rating.

Class C High surface temperatures within the limits of human tolerance, with limited water presence.

Class D Arid worlds with low temperature ranges. This sometimes indicates planets where the available moisture is locked in extensive ice fields.

Class E Moist, low temperature worlds, usually indicating cold planets with extensive oceans or seas.

Classes F and G Special categories. See navigation manuals at time of issue.

NOTE Beacon and IB (Inhabited Body) numbers refer to the standard listings contained in the Galactic Trade Council Catalogue with which every vessel must be equipped.

Alpha Centauri I

TYPE OF SUN: G4 double. Magnitude 4.38. Radial velocity 13.8 M.P.S.

POSITION: Southern hemisphere—Centaurus. Beacon code SAC 440.

DISTANCE FROM EARTH: 4.2 light years.

TYPE OF PLANET: *Class A Terran: Escape velocity 7.2 M.P.S. Federation catalogue no. 1B 13a. Sovereign World. Landing restricted to authorized sites only via TTA Regional Flight Control.*

Early in the year 2036 one of the most significant events in the history of Earth took place when an unmanned survey ship made contact with the inhabitants of Alpha Centauri. Not only was this the first proof that Man was not alone in the vast reaches of interstellar space, but was also the beginning of a new era. Once the communications barrier had been removed, there followed an exchange of information and technology which lent fresh impetus to the exploration of space, and which provided the basis for an association which was to lead to the founding of the Galactic Federation.

Alphan technology

The Alphans themselves possessed a high technology and culture which was, in many respects, more advanced than our own at that time. Their society had achieved a level of industrial efficiency high enough to free them from most of the more mundane occupations, and they had evolved a fascinating and complex cultural heritage. They had little interest in matters outside their own world and indeed, the early contact with Man was viewed almost as an intrusion. Fortunately they had not become so introverted that they were unable to appreciate the opportunities offered by co-operation with another race of intelligent beings, and the contact rekindled their curiosity about the galaxy we shared. Despite their strong interest in their domestic environment, they nevertheless had developed a high degree of astronautic technology and had been operating in local space for a considerable time. This was in part due to a long history of antagonism with their neighbours, the Proxima Centaurians and the greater proportion of their hardware was military in nature. The rest of their spacecraft were industrial, and primarily involved in the mining industry which was concentrated around Barnards Star.

Our own space technology owes much to the Alphans, and benefited considerably from our alliance during the disastrous Proxima Wars which lasted from 2048 to 2068. Many of our present vessels, both military and civil, have come off Alphan slips, or are fitted with their equipment. The standard Gravity-resist Generator designed in 2045 by Dr Hans Berger was a direct result of Alphan co-operation.

Social structure

The people themselves are physically very like ourselves, although more slender in build. The chief difference is that their gestation period is about twenty months and the off spring are significantly more advanced at birth. As a result, population growth is extremely slow and even today the level is lower than before the war which reduced their numbers by over a third.

Possibly because of this slow and infrequent reproduction rate, the society is very much a maternal one, and this is reflected in the way the population is distributed. There are few communities which could be described as villages or even towns, as they tend to congregate in urban developments which to us would

The Alphans were the first sentient beings encountered, and enjoy a complex and elegant culture allied to a sophisticated technology. Their architecture is very individual as is demonstrated by the Birth-house illustrated here, to which the family retires for the long period of gestation.
Overleaf
The first view of Alpha Centauri for the passengers aboard this liner is very similar to Earth. Once on the surface, however, there is much to occupy the tourist's interest, both in the cities and the countryside.

seem somewhat overcrowded. There are, however, several small settlements serving some of the more isolated industries.

The tourist

For the tourist this situation offers many attractions, as there are vast areas of open countryside which rival the most cherished beauty spots still to be found on Earth but which are as, empty as the latter used to be during our early history. The similarity in plant forms and the uncluttered vistas offer the romantic visitor a glimpse of what Earth must have been like before the twenty-first century.

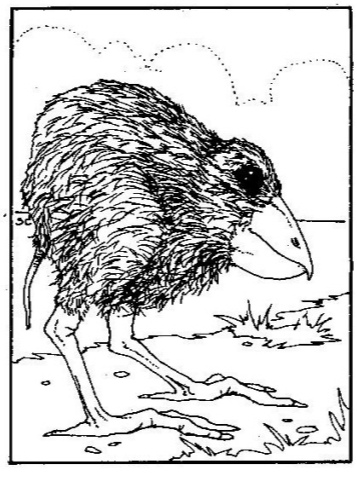
For those of a more energetic disposition the cities of Alpha Centauri offer a wealth of novel attractions which are unequalled anywhere in the Federation. Apart from the more dubious pursuits for which certain of the cities are famous, there is an almost infinite variety of cultural entertainment, from art and craft exhibitions and mind theatre to the remarkable sonic tapestries for which the Alphans are justly renowned. The products of their entertainments industry are, in fact, one of their major exports. The fullest appreciation of their skills results, however, from sampling them in the lively and enthusiastic environment in which they are created.

For those experiencing a sonic tapestry for the first time it must be remembered that the effect can sometimes be mentally disturbing since the intricate web of sounds is directed onto the optic nerve which translates the impulses into impressions of colour. The apparent contradiction between this effect and the visual images the eye itself is actually recording can be extremely unsettling for the novice, and it is advisable to start with some of the shorter pieces.

Alphan architecture is also worthy of study, since they began to employ advanced artificial materials fairly early in their history which freed them from many of the structural constraints which had to be considered until recent years by our own designers. As a result, the Alphans were able to build structures to suit their aesthetic sensibilities without having to make concessions to mass, weight distribution, etc.

Some of the best examples are to be found outside the cities in the dwellings constructed to house families during the mother's pregnancy. These are usually shared by more than one family group who move in only for the period from conception to birth. It is comparatively easy to arrange to rent these properties for short periods, and their rural situations together with their close proximity to the cities where their owners normally live, make them ideal for the short-term visitor.

The ubiquitous Porpui, a flightless bird.



One of the few dangerous species this planet possesses is the Gralph, a wolf-like creature whose bite is extremely venomous. Nocturnal in habit, they hunt by sight since they see in the infra-red spectrum and are virtually blind during daylight. Fortunately their numbers have dwindled as agricultural land has increased, and they now inhabit only the most remote regions of the planet.

Bethrell

Although the inhabitants of this delightful planet are naturally gentle and generous of spirit, it is important to remember that they possess an extremely intricate code of behaviour and find any major breach of etiquette physically distressing. When faced with any persistent offender they react by imposing "Bethrell" which is essentially a refusal to accept the existence of the guilty party. By some means not clearly understood, this is communicated to all their fellows, and although it may not appear of any great significance to an off-worlder, it is extremely effective. Unless you have experienced the process it is difficult to appreciate the unpleasantness and even danger of being unable to evoke a reaction, on any level, from the creatures of the world you are on. However, there are numerous "Subliminstruct" courses available to help visitors avoid the pitfalls.

Proxima Centauri III

TYPE OF SUN: K5 red dwarf, 9th Magnitude.

POSITION: Southern hemisphere—Centaurus. Beacon code SPC 1313.

DISTANCE FROM EARTH: 4.2 light years.

TYPE OF PLANET: *Class C2. Escape velocity 5.9 M.P.S. Federation catalogue no. 1B 37b. Sovereign World. Landing via TTA Regional Flight Control subject to local customs permit. NB No restrictions on site, but surface radiation checks essential.*

One of the few examples of Proximan wildlife which survived the war was the impressive and ferocious Goricon which inhabits the polar regions. Now a protected species, it was almost hunted to extinction for its valuable skin. The city in the background is Vasta, the only surviving example of pre-war Proximan architecture.

Although the Alpha Centaurians were the first sentient species encountered by Man, they were not the race of beings closest to the Sol System. The red sun of Proxima lies slightly closer to us and is accompanied by three companion bodies, the outermost of which is the homeworld of a species with whom our first contact was unfortunate. Their unprovoked attack on the Alphans, and the destruction of one of our Interstellar Queen passenger liners, resulted in the devastating conflict which left all three systems exhausted, and the Proxima Homeworld a radioactive desert.

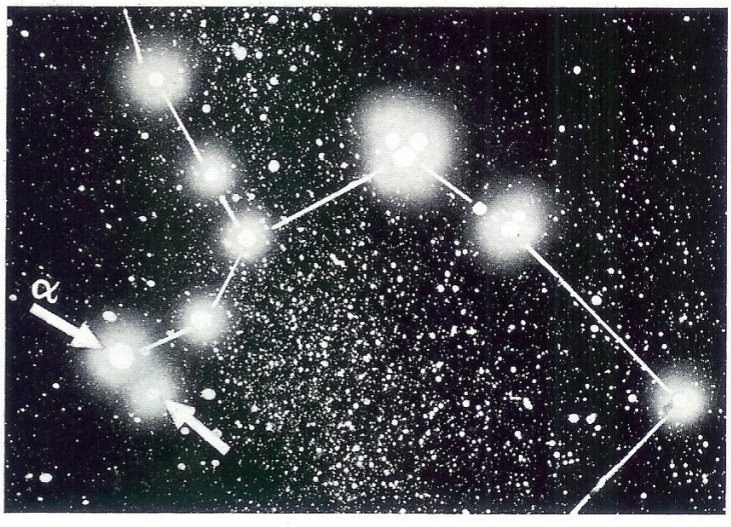
Economic assistance

During the years of restoration which followed the surrender of Proxima, the grave plight of the defeated race was overlooked in the effort to restore the fortunes of the Allied systems, and it was not until some years later that they were able to offer assistance to the dying planet. The population had been decimated in the final offensive, and had been further reduced by the after-effects of war. Those that remained had reverted to primitive tribal groups foraging among the subterranean ruins of their sub-surface defences, as the exterior of the planet was still uninhabitable when scouts of the Terran Welfare Service landed.

Once the economies of the other worlds had recovered sufficiently, a massive programme was launched to help the Proximans restore their civilization, and gradually they began to play a part in the affairs of the Galactic Federation. Sadly, very little remains of their original culture except the narrative arts, as word of mouth was almost the only means of communication during the post-war period. Their efforts to preserve knowledge at a time when even simple recording materials were virtually non-existent led them to develop a highly individual and sophisticated tradition of story telling not unlike some of the ancient Terran races.

The "Gathering of Wisdom" festivals which are held several times a year are well

The close neighbours, Alpha and Proxima Centauri.



The Proximans, though hairless, are almost identical to ourselves, except in the arrangement of their internal organs. The illustration shows an unsuccessful entrant in the planetary air-race which attracts many off-world visitors.

worth a visit, although there are few other attractions for the casual visitor since the planet is now heavily industrialized. The enthusiasm with which the Proximans embraced their new era of technology has resulted in this world becoming one of the most important manufacturing centres in the Federation, and the few areas not already developed are fairly desolate and often still bear the scars of the holocaust.

Pre-war Proxima

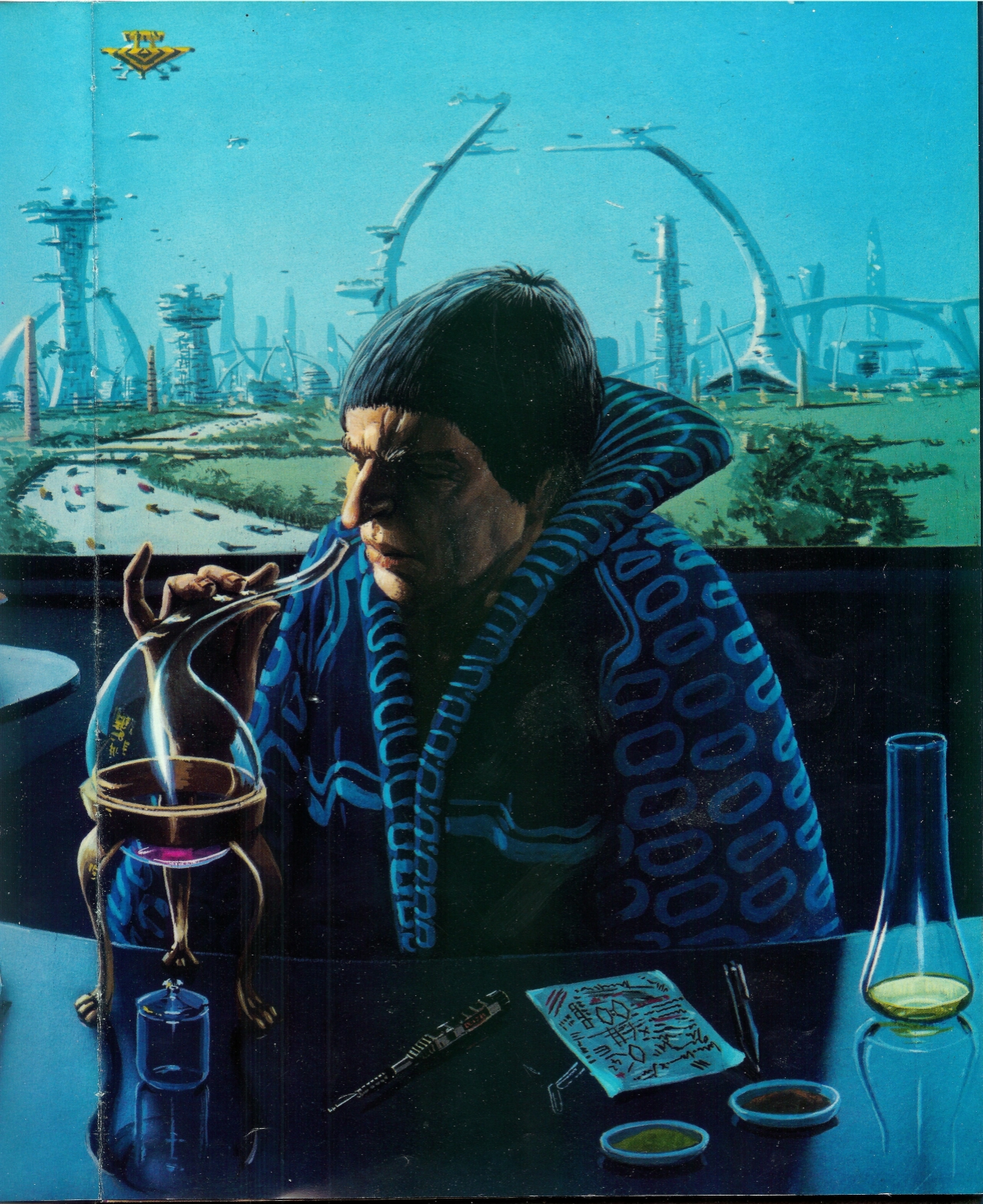
The far polar regions, however, have survived relatively unscathed and here one of the few remaining examples of Proxima III's previously rich animal life can be found. The luxuriant pelt of the fearsome Goricon is highly prized, and until recently this magnificent beast was in danger of extinction due to commercial interest in the fur trade. They are now protected, although a limited number of hunting licences are issued for the annual cull.

Most examples of early Proximan architecture have disappeared completely during the rebuilding of their surface complexes, and the present styles reflect the influences of both Earth and Alpha Centauri—the latter especially as it supplied most of the materials and expertise as part of the intensive aid programme. A unique excep-

Industrial and residential areas are intermixed, and show the marked influence of Alphan architecture. The virtual destruction of their own cultural heritage has led the Proximans to adopt elements from other planets, hence the fashion for wigs.

tion is the city of Vasta which is situated near the northernmost point of the globe. Although it is deserted except for a small scientific research settlement, and has deteriorated through neglect, it escaped the full effect of the war and provides an intriguing insight into early Proximan culture. An historic site even before the conflict began, it is a walled settlement of considerable size and its elegant spires, now shrouded in ice, are in marked contrast to contemporary Proxima architecture where the emphasis is on the functional. Despite its somewhat isolated position it attracts an increasing number of tourists, and plans are afoot to halt the decay in order to preserve the city as a national monument.

The other worlds in the Proxima system are of little interest to the tourist. Proxima II is utilized only by the mining industry as its environment is too hostile for anything but a brief stop-over. It is worth noting, however, that the output from its mines supplies not only all of Proxima's own domestic requirements, but also accounts for a great proportion of both Terran and Alphan ore consumption. The third planet, which lies barely 25 million miles from the sun, is scarcely more than a cinder from which any atmosphere has long since evaporated.



Gadgetia

TYPE OF SUN: Gamma Doradus Class F calcium star. Magnitude 3.6.

POSITION: Southern hemisphere—Doradus. Beacon code SDOR 847.

DISTANCE FROM EARTH: 47 light years.

TYPE OF PLANET: *Class D3. Escape velocity 8.2 M.P.S. Federation catalogue no. 1B 115f. Sovereign World. No landing restrictions, but use of approved sites recommended.*

The settlements of Gadgetia are entirely industrial in nature and offer little in the way of amusement to travellers. They are, however, a fascinating race and there are sufficient points of interest to justify a brief stay, although the only places suitable for humans to relax are the domed glass solar centers where the inhabitants top up their energy levels.

The planet of Gadgetia is well known for its principal industry which is the manufacture and export of electronic and mechanical hardware. Its name, in fact, is derived from an ancient English word meaning a tool, and was given to this industrious world by the crews of early survey and prospecting ships who used to call to barter for repairs. Rather than order pieces of specialized equipment from their distant bases, they would commission the local inhabitants to construct items on the spot.

The skills and inventiveness of the Gadgetians became renowned throughout the Federation and it was not long before they became an important part of the galactic trade network, supplying a huge range of manufactured goods in exchange for a curious selection of commodities which they regard as luxury goods.

One of the most prized is cotton-wool which is shipped to this intriguing planet in enormous quantities, as they have no means of producing such materials domestically. Gadgetia is almost completely devoid of any form of plant life and all derivative products are much sought after as a result. Attempts have been made on many occasions to introduce species which would flourish on this almost sterile world, but without success, as the soil is extremely poor and the absence of bacteria necessitates the constant use of extremely expensive artificial nutrients.

Mechanical bodies

There is only one significant life-form existing here, and it is quite unlike the image which would spring to mind. The Gadgetians' actual form is rather like a greyish cucumber with a large swelling at one end. They are physically almost defenceless. Evidence suggests that Gadgetia underwent a dramatic climatic change millions of years ago, which wiped out all the creatures inhabiting the planet at that time, apart from the present race. Their survival might have been due to the fact that they do not have to feed in the accepted sense, but are equipped with a complex internal system which converts light into usable energy. The area of their bodies nearest to the 'head' carries the vestiges of scales, and it is assumed that their ancestors were covered in a heat-reflective armour which protected them against their harsh environment.

Gamma Doradus.

Nowadays, of course, they do not require this shielding as they rely on the host of robots and other devices in which they place themselves in order to move about, or manipulate heavy or delicate items, and it is the mechanical bodies that they occupy that are most commonly pictured. The huge variety of different types of vehicle make it confusing for the visitor, and the business of identifying the

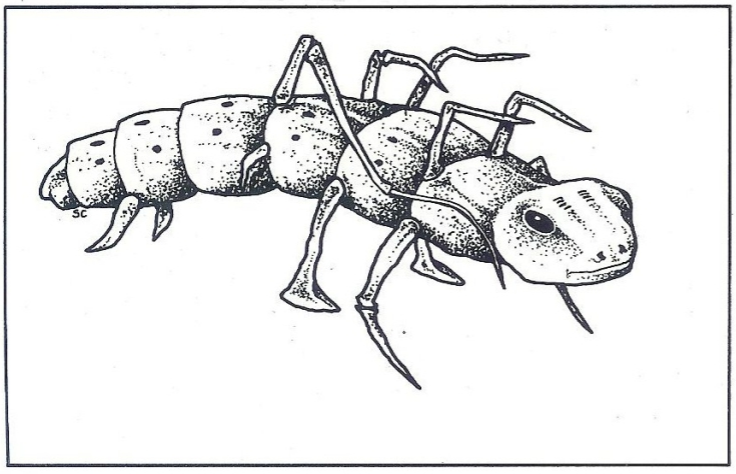
hosts is further complicated by the fact that they frequently change units according to the activity upon which they may be engaged. A further complication is the number of fully automatic work units which do not carry a passenger at all. After some time, however, it is possible to recognize the difference between the latter and a "hosted" machine.

Gadgetian history

For many years researchers were puzzled as to the means by which the Gadgetians managed to construct the elaborate tools vital to the task of creating other equipment, as they do not have limbs of any kind, and certainly not those delicate enough for the intricate task of assembly. The answer was eventually found when Dr Kit Ponder, who had been working for many years on Gadgetia and was regarded with great respect by its people, was permitted access to a structure regarded with obvious reverence by them. It was apparently a museum of their history, and is the only concession these practical and unsentimental creatures have made to romanticism. For Dr Ponder it was a treasure trove of evolutionary evidence and explained many mysteries, with the most significant artifacts being a huge number of curious hollow objects equipped with various combinations and types of projection. These were certainly suitable for the kind of work involved in producing more complex items, but there was no indication as to the method by which the limbless Gadgetians operated even these rudimentary contrivences, until a small piece of roughly inscribed metal furnished the answer.

The explanation, which took almost a year to interpret, was that these objects were in fact, secreted from pores between the scales of the earlier creatures. Initially they were probably no more than fragile projections used in moving or burrowing, but they evolved into very efficient instruments which were shed at intervals and reformed according to circumstances. The progression to the existing technological level must have taken thousands of years, although once they had succeeded in creating mechanical devices which could in turn produce more complex ones, the process would have become increasingly rapid.

The Gadgetian's early ancestor.



The sometimes awesome machines operated by the inhabitants are frequently mistaken for the people themselves. In fact, in the illustrations here and on the preceding pages the real Gadgetians are housed in the head modules of these robot units.

The present species has lost this ability and their skins are soft and fairly delicate—which is why substances such as cotton-wool are so highly prized, as they used them to line the occupied portions of their vehicles and living modules.

Solar retreat

As may be expected, the Gadgetians regard the industrialized environment as their natural one, and the structures they build are purely functional. They have no conception of a division between work and leisure and find it difficult to understand non-productive activities. The nearest pursuit to relaxation that they engage in is the essential retreat at regular intervals to the distinctive glass domes of the solar centres which dot the cities, and it is here that they recharge themselves through a photosynthetic process in order to maintain their energy levels.

Although not to everyones' taste, Gadgetia makes an interesting stop-over for travellers in the vicinity.

Nova Nevada

TYPE OF SUN: Beta Hydri Class GO. Magnitude 3.8.

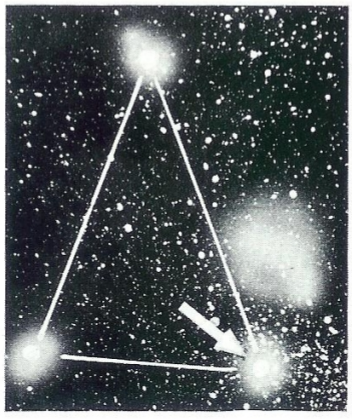
POSITION: Southern Hemisphere—Hydrus. Beacon code SHYI 638.

DISTANCE FROM EARTH: 22 light years.

TYPE OF PLANET: *Class C8. Escape velocity 7.6 M.P.S. Federation catalogue no. 1B 237. Federation Colony. No landing restrictions but all arrivals must report to the Federal Embassy.*

Due to their extraordinary powers, the solitary wandering people of Nova Nevada are known as the Magicians.

It is impossible to determine where the ever-present mists rising from the surface end, and the unbroken layer of clouds which encompass the entire planet of Nova Nevada begin. It is a world of vapours where the thick, fleecy blanket above masks the face of the sun and diffuses its light evenly over the surface. A powerful sense of unreality pervades the shadowless place, where sight and even sound are dulled by the drifting miasmas, as they ebb and flow among the rocks and banks of moist plant growth.



Beta Hydri.

Mysterious magicians

Despite the perpetual mists and the flickering, indistinct movements that always seem to occur at the extreme periphery of vision, this soft and silent planet possesses an atmosphere of gentle intimacy. It is an ancient world which has been a cradle of life for far longer than most, and has pursued its evolutionary course undisturbed by any great disaster. It is inhabited by a strange and enigmatic people who seem more a part of their dreamlike world than any sentient species yet discovered, reflecting the same qualities of gentle mystery as the shrouded landscapes they inhabit.

Their civilization has endured as long as recorded time, and may well be the oldest society in the galaxy, but perhaps because the vast reaches of space have always been obscured by the cocoon of cloud, their curiosity has been turned inwards rather than out. While Man was striving to touch the stars, the Magicians of Nova Nevada were exploring the mysteries of inner space, and the wisdom accumulated by succeeding generations has set them apart among the races of the Galaxy.

The extraordinary abilities that they have developed seem supernatural to the inhabitants of worlds that have concentrated on the physical sciences, and range from telepathic communication to the manipulation of matter by mental control. Initially they were regarded with intense suspicion as they could, if they wished, pose a considerable threat to the Galactic Federation, but it quickly became clear that the Magicians had no interest in seeking galactic mastery. Quite the reverse is true, as their most fundamental belief is that fate alone determines events and that they are simply passive observers. All other life forms are part of the broad spectrum of existence acting in accordance with divine laws, and they will avoid any involvement unless it is specifically requested.

Their ability to identify

Nova Nevada.

disease and to control it is legendary, and appeals are often made to them when epidemics occur, or new infections are encountered on other worlds. When requested in this way, they deliberate for a period of time before deciding whether or not it is within the order of things for them to interfere. Their skills apply in many other ways and their help has been sought on problems ranging from technical malfunctions to weather control.

No-one knows how many Magicians there are as they have no centralized society, no towns or cities, no racial groups, no family structure. Instead they wander ceaselessly across the surface of their planet alone, only coming together when called upon to influence a situation in some dramatic way. Although they appear to lead a solitary existence, they are constantly communicating with each other in an intuitive sense, and are instantly aware should one be in distress.

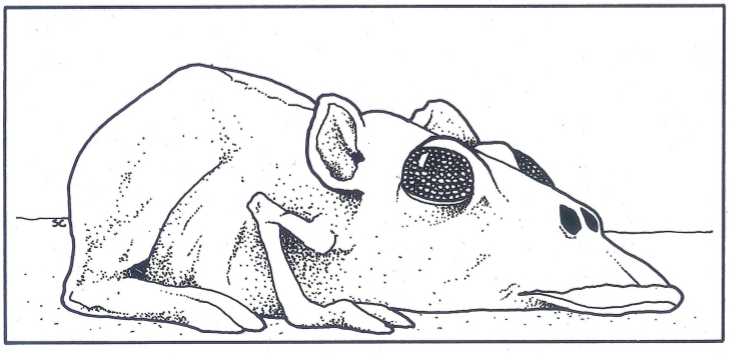
Birds and bats

Some of their remarkable powers are shared by other creatures on Nova Nevada. There is, for example, a blind bird-like animal whose brain has developed an extra lobe enabling it to "see" its surroundings by registering emanations given off by all solid objects. Another creature to be found here is a form of bat which early in its adult life lays an egg containing a mass of fine filaments, and it clutches the membraneous shell between its feet to pick up the minute vibrations of the hairs within when they respond to the presence of potential prey.

The atmosphere is largely carbon dioxide, and the need for humans to rely on breathing apparatus places a restriction on the number of visitors to this twilight planet. The Magicians have not permitted the construction of artificial environments as they feel that the continuing presence of alien entities would disturb the harmonic balance of the environment. They have no objection, however, to the few tourists who choose to view at first hand the home of a race that was old when the first simple organism stirred in the waters of Earth.

Both of these remarkable creatures rely on extrasensory perception for survival on this mysterious planet.

The Oricus, a nocturnal herbivore.



Swarmy

TYPE OF SUN: Alpha Phoenicis Class G5. Magnitude 0.6.

POSITION: Southern hemisphere—Phoenix. Beacon code SPHE 481.

DISTANCE FROM EARTH: 76 light years.

TYPE OF PLANET: *Class B7. Escape velocity 6.2 M.P.S. Federation catalogue no. 1B 334. Independent Status. Landing subject to local conditions. Security uncertain.*

Swarmy is one of the small number of planets which seem to be at an early stage in their evolutionary development where a sentient life form is in the process of emerging, with the result that it is awarded a special Federation status. It is not actively involved with the business of the expanding association of inhabited worlds which comprises the Federation but, nevertheless, as the home of forms of life demonstrating intelligence of an advanced nature, cannot be considered a virgin world eligible for colonization.

It is a fundamental law of the galactic group that no member planets or systems shall attempt to interfere with the progress of any species likely to develop individual sentience, and although the authorities maintain a close watch on this particular world, it has not been commercially exploited in any way. There are several research settlements based on the surface, and some areas have been cleared for private traffic of a non-commercial nature, but the greater part of the planet is untouched by any off-world influence.

The independent status of Swarmy means that any ship can make unrestricted landfall provided its intentions are not commercial or military in nature, as the letter of the law states that control is in the hands of the native species. However, as Beacon traffic control will suggest, there are dangers in so doing, since Federation vessels cannot be afforded the protection normally available.

Planetary conditions

The planet itself is exceptionally attractive, covered as it is by luxuriant plant life, a wide variety of terrain and extensive, shallow seas. The climate is primarily Earth-tropical although the atmosphere is thin and extends far out into space making breathing apparatus necessary for extended excursions. The equatorial regions are fairly uncomfortable with heat and humidity being unpleasantly high, but even the polar regions are within human tolerance without special insulation of any kind. An added attraction is that the gravitational field is comparatively weak, which compensates for the slightly enervating climate.

The rich variety of life on the surface has yet to be fully studied, but a considerable number of unusual and edible plant species has already been isolated by the nutritionists working there. The attractiveness of this unspoiled planet has generated considerable interest among property speculators and other commercial interests, and the Federation's officers are having to consider stronger measures to preserve the integrity of Swarmy.

Insect life

The strangely apt name this world bears was derived, as is often the case with planets within easy reach of the Sol system, by the earlier explorers and prospectors who roamed through space in the early days of space travel, and refers to a unique and unsettling local phenomenon. Unlike any other environment encountered so far, the upper atmosphere of Swarmy is inhabited by a number of creatures where only micro-organisms are normally found. At certain times during the

A private solar-sailer encounters the infrequent, but no less unpleasant phenomenon of the high-flying creatures of Swarmy as they congregate during the mating season in the manner which earned this planet its name.
Overleaf
A typical view from the equatorial regions of Swarmy showing one of the extraordinary "Skislands" of helium-filled pumice, which are often rich enough in organic compounds to support plant life.

The most spectacular creature known to Man is the Phoenix Squid. Seven of these gigantic and apparently intelligent beings drift just outside the Swarmy field of gravity, and are known to communicate with each other using hyperwave signals similar to those used by spacecraft.

260-day annual cycle an event occurs which can be an alarming, though apparently harmless, experience for anyone whose visit coincides with it. Large, Fly-like creatures, whose numbers are otherwise spread thinly about the upper levels of the gas envelope, congregate in certain areas in order to reproduce, and seem to be attracted towards any solid object encountered where they cluster together in an enormous colony containing many millions of the cat-sized creatures. Their appearance is remarkably like *Musca domestica*, the household fly which is found on Earth, but with a single instead of double set of wings and rudimentary legs which are solely used during mating.

Native intelligence

Undoubtedly the most spectacular life-form to be found anywhere in known space exists at the outermost limits of Swarmy's atmosphere and represents the first of the two native intelligences discovered so far. Similar in appearance to the Cephalopods, these vast, crimson organisms drift in erratic orbits around the planet and are an awe-inspiring sight. Only seven of these unbelievable beings have been seen but much is known

about them. Despite their fearsome appearance they are benign, and do not seem to resent close examination by the research teams who have established that there is a considerable communication between the creatures using hyperwaves.

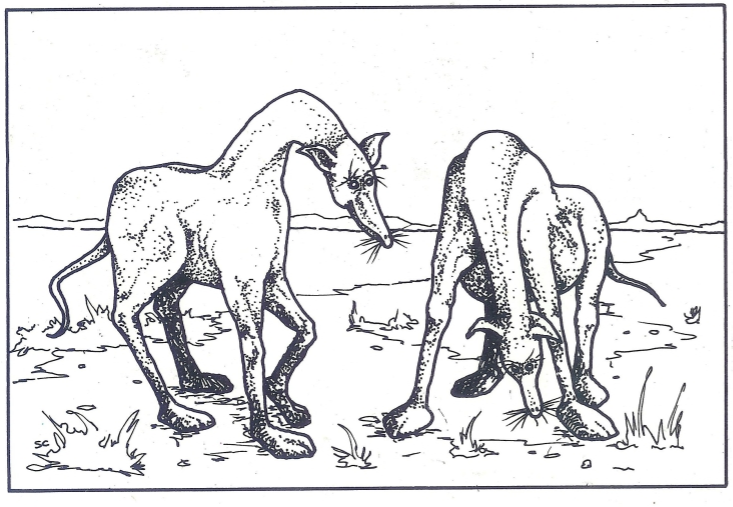
They have also demonstrated an ability to detach certain portions of their bodies from the cluster of protrusions extending from their "heads" which are thrown into orbits which intersect with those of their fellows, where they are caught, handled and then returned. It is not clear whether this is a further means of communication or a reproductive process. Their feeding habits are also unknown, although one theory is that they assimilate gases, possibly hydrogen, through the pores lining the undersides of the enormous tentacles.

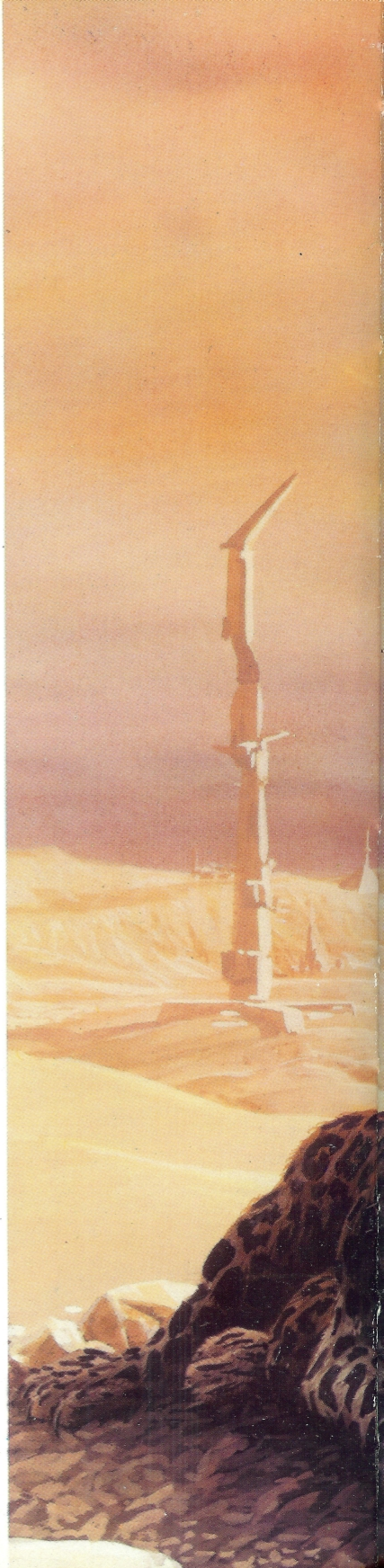
The second intelligent creature of Swarmy is an ape-like biped which lives on the surface, and which has been the subject of considerable study by Dr Dick Tanseley, the controversial anthropologist best known for his work in developing the intelligence of certain Terran species, notably *Felis pardus*. He believes that *Homo phoenicis,* as he has labelled them, is almost identical to Man's earliest ancestors, and that with modern accelerated learning techniques they could, within a few generations, be actively involved with the Federation as a member state.

Until the question of legal status which is currently being debated has been resolved, it is important for travellers to remember how vulnerable a developing world is to outside influences and to co-operate with the local authorities in all contact with Swarmy.

The celebrated Dr Tanseley, his wife and an Alphan assistant communicate with one of the primitive creatures he has christened Homo phoenicis. *Many experts believe the latter to be similar to the "Missing Link" in Man's own ancestry.*

The scavenging Long-dogs are dwindling in number.





Reptilia

TYPE OF SUN: Nodus II yellow giant type G8. Magnitude 0.4.

POSITION: Northern hemisphere—Draco. Beacon code NDRA 124.

DISTANCE FROM EARTH: 120 light years.

TYPE OF PLANET: *Class E5. Escape velocity 8.4 M.P.S. Federation catalogue no. 1B 93. Sovereign World with provisional Federated status. Landing restricted to Trade Council licence for official sites only.*

Very often the first sight visitors to Reptilia have of the local wildlife is the arrival of the nearest Scarlet Dragon whose ferocious-looking form belies its placid and inquisitive nature.

Reptilia is not a world which can be described as having instant appeal to the first-time visitor, as its inhabitants present a rather fearsome aspect for those accustomed to bipedal society. As the name of the planet suggests almost all of the higher forms of life are reptilian, and some species are of considerable size. Despite the work of cataloguing which has been continuing for many years, there is a host of species yet to be identified and studied.

Inquisitive dragons

The enormous number of competing types of life-form has produced several varieties which are dangerous to Man, but in most cases, provided that a reasonable amount of care is taken when travelling on the surface, they are more alarmed by humanoids than the reverse, and do not pose any constant threat. One of the most common land-dwelling animals is the huge Scarlet Dragon lizard which is often the first sight visitors have of the local wildlife, and although it is a terrifying sight by Terran standards, it is in fact quite harmless and even amiable by disposition. Sadly, many are needlessly destroyed every year by inexperienced crews who mistake its intense curiosity for aggression when they rush out to examine newly arrived ships. The scent of Man seems to fascinate them, and parties travelling on foot are often easily identified from a distance by their escort of lumbering giants.

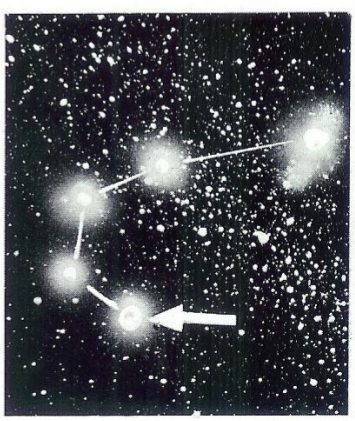
Water-Slycaths

The status of most advanced type of life-form is shared by two physically similar, but socially very different creatures, both of which are believed to belong to the same species; *Saurus intelligens*. Somewhere along their evolutionary path the two forms diverged and developed superficial differences better suited to their respective environments. The Slycaths were for some time considered the only intelligent species on the planet as they were the first encountered by off-worlders, and possess an advanced society which is easy to identify. Greater in numbers than their land-dwelling brothers, these amphibious beings have built their cities around the edges of the larger expanses of water where they spend most of their time searching for food or farming the shallower regions. They are primarily herbivorous, and almost all their supply of foodstuffs comes from these submarine agricultural areas.

Their technology is centered around their aquatic lifestyle, and their skills have contributed significantly to the science of hydroponics. The Slycaths are also hydraulics experts and their cities, although above water level, are equipped with elaborate systems for water movement and distribution. Attempts to entice their leading engineers to other worlds where their abilities could be utilized have not succeeded, however.

The Slycaths are intensely social creatures and work very closely with one another,

Nodus II.



TORUS

The first intelligent species identified on Reptilia was the Slycath, an amphibious creature with a sophisticated aquatic civilization.

as even the smallest project is seen as a communal affair. There are no family units as such, but mated couples often stay together long enough to raise more than one brood, each breeding season lasting for several years as compared to an average life-span of 180 Terran years.

Land-based Strollers

In contrast to their water-loving fellows the Strollers as the parallel species are called, are solitary and carnivorous beings who do not seem to favour static territories, but roam ceaselessly about the inland regions. They do, however, congregate at frequent intervals to exchange information and to discuss points which affect the situations of the various regional groups. It has been noted by observers that they often decide to remove types of prey from the "menu" for set periods of time, when the latters' numbers have been seriously depleted through overhunting or disease. That this code of behaviour is rigidly enforced is demonstrated by the fact that offenders are identified and hunted to death by their colleagues, sometimes over considerable distances or lengths of time, and no culprit discovered during Man's experience of Reptilia has escaped retribution. This harsh justice is also meted out to any Stroller injuring or killing another. So effective is this system that individuals guilty of any of the punishable misdemeanours often go

The lack of the Slycath's gill wings and the presence of ladder-like temperature control scales along the back identify the Stroller. They can be subject to unpredictable fits of anger, often destroying all in their path.

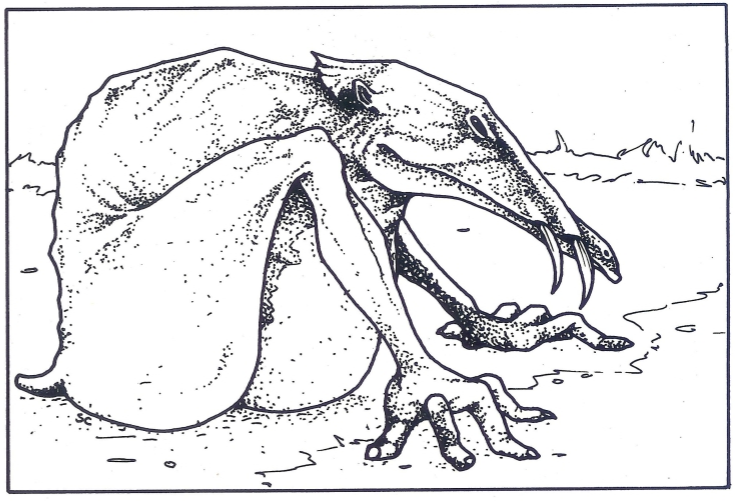
into a trance-like state, neither eating nor moving until death overtakes them.

The death of a Stroller is always greeted with obvious distress by its companions, even when the subject had been deliberately "executed", and the elaborate funerary rites performed are eerily compelling to watch. Almost as though by supernatural intuition, Strollers from far and wide seem to learn of the event and gather together in a circle around the carcass where they perform a strangely beautiful song consisting of a complex arrangement of fluting sounds, with each individual contributing a single series of notes. This alien concert continues for several hours before, in order of age seniority, they consume the body of the victim. The entire group will then stand motionless for the rest of the day and the following night until their silent dispersal the next morning.

Physically, the Strollers resemble the Slycaths very closely, lacking only the wing-like dorsal protrusions which are the external gills enabling the latter to extract oxygen from the water, and the strange facial extensions which are the specialized sensory organs which substitute for a scenting mechanism. The Strollers are also distinguishable by the ladder of bony ridges along their backs which act as radiators to prevent overheating of the body in high temperatures.

Although Reptilia is classed as a Sovereign World its membership of the Federation is only provisional as neither of the dominant species show any desire for active involvement. It is, therefore, important that visitors bear in mind the fact that the Federation has limited jurisdiction here and cannot guarantee safety to crews making a landfall.

The venomous Killipy is found in desert areas.



Antico

TYPE OF SUN: Delta Phoenicis Class G4. Magnitude 1.1.

POSITION: Southern hemisphere—Phoenix. Beacon code SPHE 215.

DISTANCE FROM EARTH: 120 light years.

TYPE OF PLANET: *Class A6. Escape velocity 7.5 M.P.S. Federation catalogue no. 1B 219. Colonial World with special status. Ample and unrestricted landing within colonial territories, elsewhere subject to Trade Council clearance.*

Without doubt one of the most fascinating planets for travellers from the Sol System is the distant world of Antico, orbiting Delta Phoenicis in a two-planet system which also contains a number of captive moons. Although it is inhabited by a native intelligence which would place it off-limits for the purposes of settlement, there is a sizeable colony which was established in the very earliest days of the Federation's expansion, when Delta Phoenicis was one of the most distant perimeter suns. During this formative period, the vogue for colonial expansion continued unchecked for some years, particularly in deep space, and it was not until several disasters had occurred that stringent controls were imposed. Fortunately some expeditions were successful for both settler and any indigenous intelligence that may have existed, and Antico was one of the happier examples.

Terran gods

The native Antican people, though primitive technologically, are well developed as a species and resemble closely some of the early human groups. They seem to have accepted the presence of the Terran settlers without there being any major disorientation of their culture. Fortunately, they already possessed a form of religion based on worship of the sun, and see the arrival of the early Earthmen as being the descent of their god's messengers to live among them and protect them. The delicacy of the situation is respected by the colonists who are careful not to upset the status quo and regard their primitive worshippers with affection, assisting with current technology and methods when it becomes apparent that the natives will not succeed in overcoming major threats to their survival on their own.

To the Anticans, the settlers and their technology must indeed appear as gods, and it is now part of their custom that every young male should undertake a pilgrimage to the outer walls of the city once every five Antican years (each year being approximately 290 Terran days). None has ever entered the city, nor indeed, would ever wish to, but regard it as sufficient to simply gaze at the distant city walls. Scarcely a day passes without the view from inside the walls including the faraway shapes of one or more of the proud warrior people motionless on the horizon.

Mesozoic reptiles

The global environment is very reminiscent of Earth's Mesozoic era, and the main body of creatures existing outside the settlement are of various reptilian orders remarkably similar to the dinosaurs of Earth. The relationship between the Anticans and the sometimes enormous saurian creatures they live among is particularly interesting. Certain species have become almost domesticated and are used by the natives for transport or certain types of heavy work, but the rest

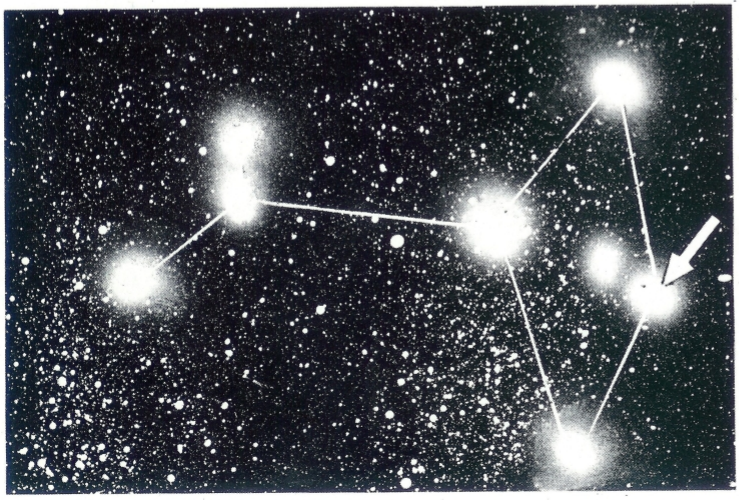
Life for the Anticans is a battle against almost overwhelming odds on a planet where the rest of the ecology is much as it was during part of Earth's own prehistoric era. Here, an Antican hunter desperately tries to escape the jaws of the feared Pinnasaurus.
Overleaf
The Federation settlers occupying Antico's only colony are regarded as gods by the natives, but are nevertheless vulnerable to danger in the same way as their worshippers. The enormous bat-like creature which has attacked this welfare officer's Skimmer is known to the natives as a Skekkle, and is one of several flying creatures found here.

groups have an established warrior elite who also undertake the responsibility of being the hunters for the rest of the tribe. The rest, except for individuals who seem to be priests of some kind, devote their time to the elementary agricultural activities which most tribes have developed. This is, of course, closely related to the region inhabited, as those in the tropical zones are more advanced in this respect than those occupying the arid regions which cover the greater part of the surface.

Most groups have yet to develop a proper architecture, and make use of natural shelter to protect themselves from the environment, adding to or improving it in a fairly haphazard way using local materials. Those in the equatorial regions are more advanced in building techniques as they have an abundance of suitable materials in the form of woody plant growth with which they have learned to work. The decorative arts generally are much more advanced, and show a high degree of manipulative skills in the working of metals or stone. Examples of their work are much sought after both within the colony and elsewhere in the Galaxy, and despite the efforts of the Federal Customs and Welfare Forces a steady flow of illegally obtained artefacts find their way on to the galactic art market.

Movement outside the settlement is rigidly controlled, but organized tours are continually operated for the tourist trade, and although Antico is too far away for most private traffic, it is well worth considering making the journey in order to witness first hand the emergence and development of a noble species with a striking resemblance to Mankind.

Delta Phoenicis.



The Pterosaurus *is one of several airborne species inhabiting the planet. They assume the colonist's aircraft to be either prey or predators and pose as great a hazard to atmospheric travel as do the great lizards to surface expeditions.*

Aquatica

TYPE OF SUN: Gamma Sculptoris Class G8. Magnitude 1.1.

POSITION: Southern hemisphere—Sculptor. Beacon code SSCL 87.

DISTANCE FROM EARTH: 155 light years.

TYPE OF PLANET: *Class E9. Escape velocity 8.9 M.P.S. Federation catalogue no. 1B 772. Sovereign World. Landing unrestricted for Federation sites. Only five sites available, however, and only vessels equipped for liquid surface touchdown should attempt local landings.*

The intellectually gifted Aquaticans look almost as though they have stepped straight out of twentieth-century popular literature but, despite their appearance, they show every sign of becoming very important members of the Galactic Federation.

The study of ancient Terran literature, particularly that of the twentieth and early twenty-first centuries, reveals a great deal about our predecessors' attempts to visualize the forms that extra-terrestrial life might take. Two interesting points which are immediately apparent are firstly, that it was difficult for them to suggest the full range of possibilities that we now know to exist; and secondly, that of the forms popularly imagined, the inhabitants of Aquatica would fit one of the commonest stereotypes.

Early impressions

The close examination of this planet is a comparatively recent event, as surface conditions made it of little interest to earlier explorers and survey teams. Approximately eighty percent of the surface is water and nearly ten percent is under the northern polar ice cap. The remaining land area is distributed around the globe in the form of thousands of small swampy islands, each of little commercial value.

Early Federation vessels engaged in the charting of space within the boundaries of the Perimeter Worlds made several visits during the course of their missions, and one of the teams did detect the existence of certain artificial structures, but on closer inspection these proved to be unoccupied and derelict complexes. No sign of life was apparent and it was concluded that whatever civilization had produced these artefacts—some quite extensive—had long since perished, possibly as a result of flooding caused by the melting of the polar ice sheets.

An orbital study center was established as a matter of routine, and data collected suggested that Gamma Sculptoris had increased its activity dramatically at some time about three thousand Earth years earlier, resulting in the significant rise in the water level. Despite the apparent absence of higher forms of life, the vast sea which covered the planet was extremely rich in micro-organisms and was a veritable soup of life. The climate was not appealing, and consisted of an endless cycle of evaporation and precipitation. The land masses that existed away from the small northern ice-fields were the isolated peaks of what had once been extensive mountain ranges, jutting out of the turbid ocean and filmed in the moist, spongy mosses and algae that flourished on every exposed surface.

Every indication was that this was a planet at the very earliest stage in the development of life. The great demands imposed by the rapid expansion of the Federation during this period made further study impossible and the research modules were withdrawn for service elsewhere. Eventually, however, it was decided that the opportunity of monitoring a world at an early stage of its evolution was too rare to overlook, and new stations were established.

Evidence of life

Unlike the previous module, which was an unmanned data collector, the replacements were operated by Federation personnel who were able to conduct their investigations at surface as well as orbital level. It was during one of these expeditions that the first clue to the real situation on Aquatica came to light, when a two-man team who were carrying

out a specimen-collecting tour set down their small transfer bus on an atoll in the northern temperate zone. As they slipped and stumbled their way across the greasy surface, one of them noticed several patches of bare rock near the water's edge as though the otherwise unbroken carpet of slimy growth had been scraped away deliberately. Even as they peered at the bruised vegetation, it was growing back over the bare patches at a detectable rate—which implied that the removal had taken place shortly before they had arrived at the spot.

Understandably excited, they returned at once to their base, where it was decided to concentrate every resource available on the task of monitoring as many of the tiny outcrops as possible with their long-range detectors. The decision was soon justified and within an hour of the data being received, a report was on its way through hyperspace to their main base near Gamma Piscis Austrini, about twenty-five light years away.

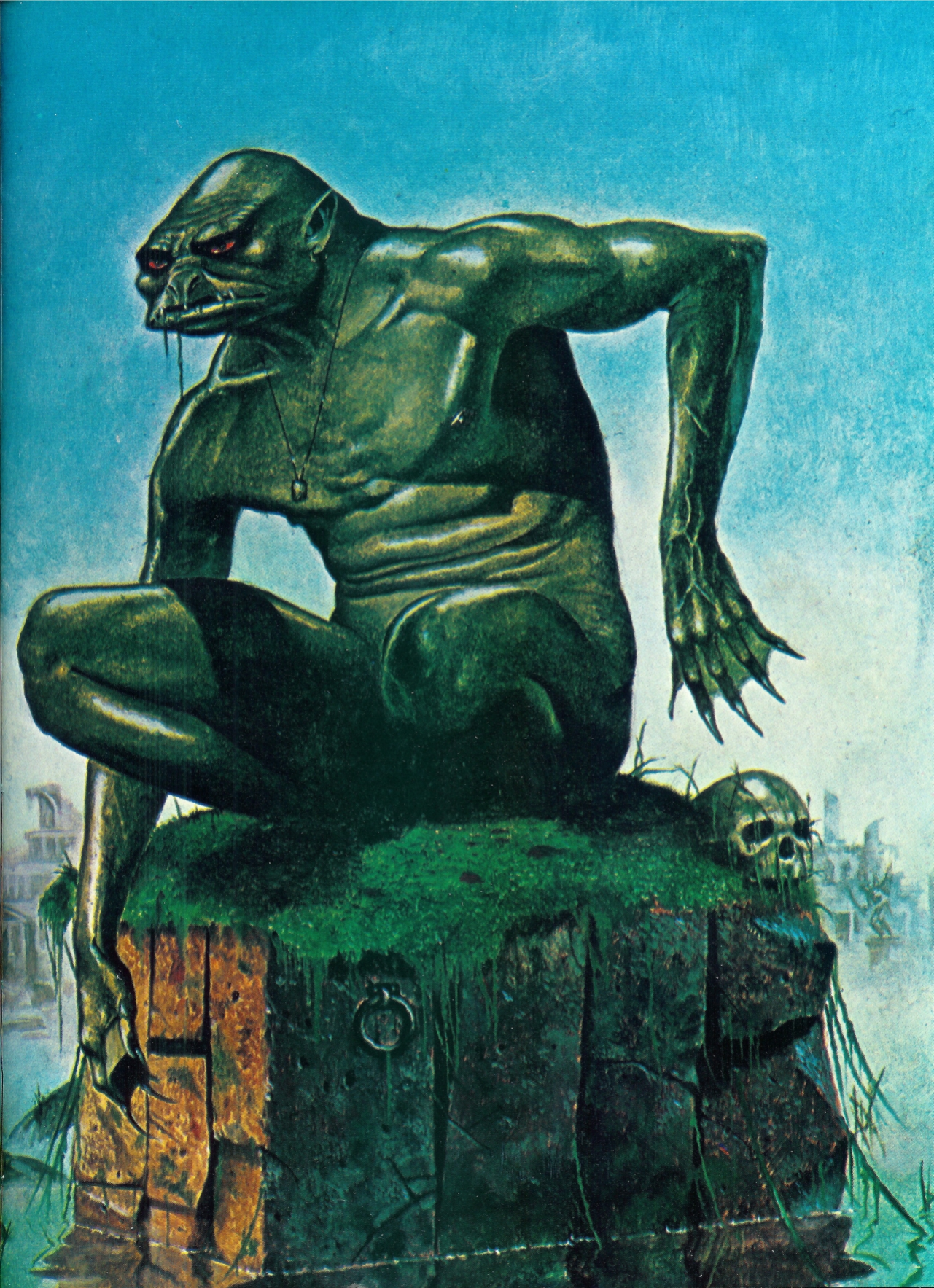
The native Water-shrew.

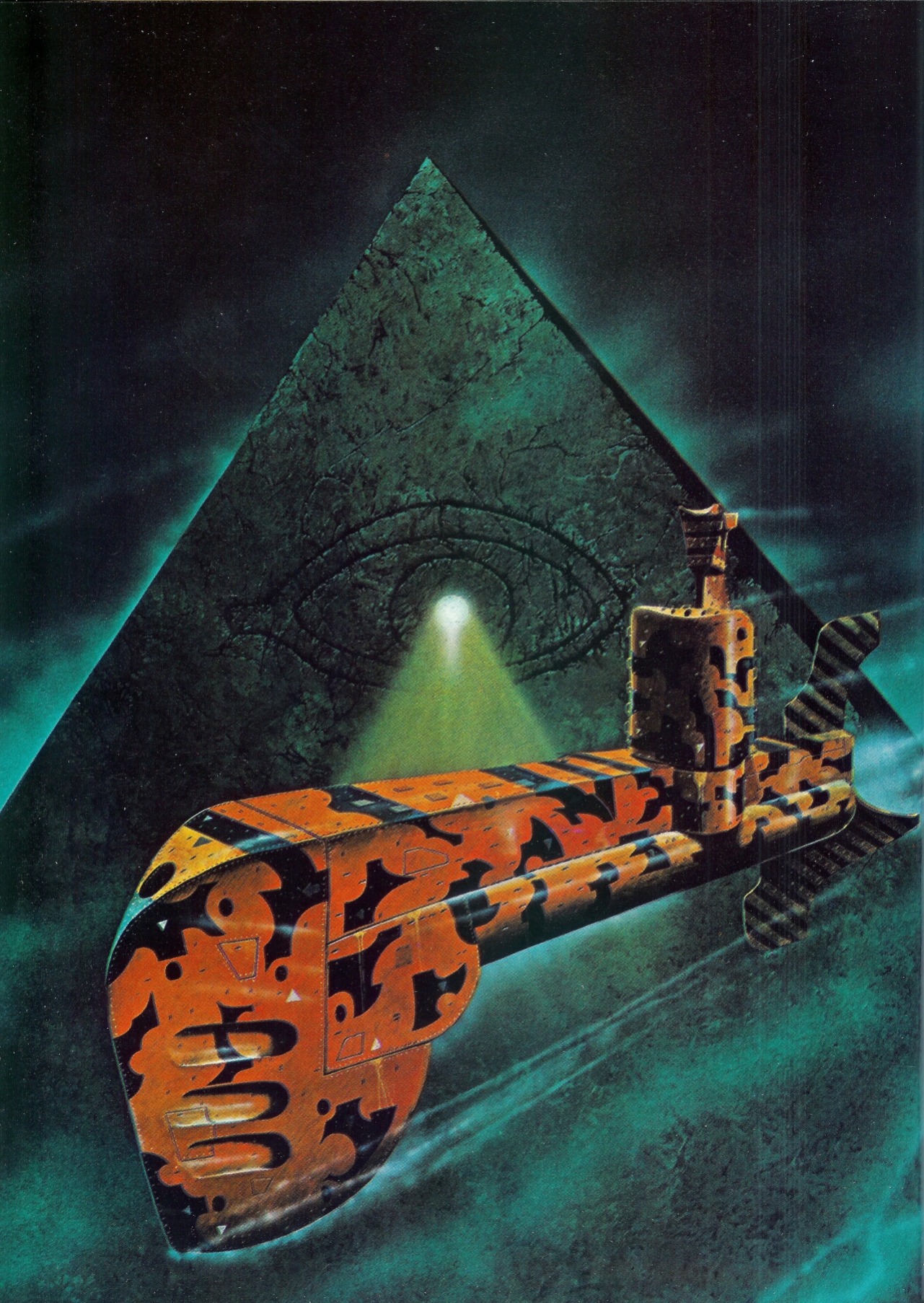
The news that a major species had been discovered on Aquatica caused quite a stir, and a full-scale research mission was authorized and the teams dispatched within a week of the news being received. In the meantime, several examples of the same creature had been spotted, together with a sighting of a second, larger organism. Once the reinforcements had arrived and begun work, evidence that a wealth of advanced life existed in the thick, opaque waters below accumulated.

The Aquaticans

The most frequently identified creature was a man-sized amphibious form which, from its occasional habit of emerging from the sea to bask on the exposed rocks, was assumed to be responsible for the scuff marks which precipitated the rekindling of scientific interest in Aquatica. It was humanoid in form but was green and scaly with webbed extremities, and looked like a twentieth-century artist's impression of an alien species. They moved about the ocean in shoals of up to a hundred, and their practice of swimming near

There are a number of superficially different varieties among the intelligent inhabitants of this watery world. The type illustrated live in the warmer regions and lack the scales of the cold-water groups. In the background are the remains of one of Aquatica's mysterious ruins.





There is ample evidence that Aquatica was once inhabited by an advanced species which has since disappeared. This mysterious structure rising from the seabed seems to be a kind of beacon which is triggered by the proximity of any large object. Its actual purpose, and method of operation, have not yet been established.

to the surface as soon as the sun warmed the morning air suggested that they were cold-blooded.

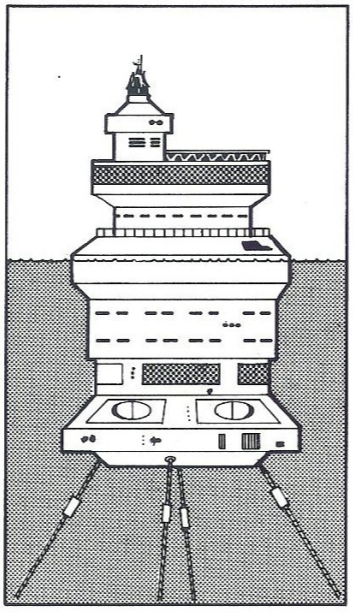
Some weeks later four floating modules arrived and were stationed at points on the seas where frequent sightings had occurred, and the reaction was virtually instantaneous. Almost before the crews had settled into their stations, the creatures were arriving to investigate these curious structures, and were even attempting to climb the steep metallic sides of the modules. Later they proved more than willing to enter the study compartments and submit to close examination.

Perhaps the most astonishing fact to come to light was their capacity for accelerated learning, and several specimens were taught the elements of communication using computers to translate concepts into images understood by the separate parties. This advance opened the doors to a host of revelations as to the nature of their society. They already had a comprehensive common language and an advanced social structure and in every respect qualified for the status of sentient beings.

It was also learned that deeper in the dark seas existed other species which the Aquaticans regarded with a fearful respect. As to the strange and desolate ruined cities, they were unable to provide any precise information, but they were obviously built by another race of beings at some time in Aquatica's past. Teams investigating the gaunt and decaying structures failed to find any real evidence as to the architects. The suggestion that the survivors of the cataclysm which overtook what had clearly been an advanced species had evolved into the amphibians being studied was ruled out, in view of the short span of elapsed time. It seems more likely that the "mermen", as they had been dubbed, had been allowed to evolve due to the absence of competition from a more advanced species.

Interest in Aquatica was spreading rapidly throughout the scientific circles of the galaxy even without further demonstrations of the indig-

A surface station.



enous intellectual potential. Nevertheless, once keyboards had been adapted for the longnailed digits of the Aquaticans, they were able to start keying in their own computer programmes within a few days of being introduced to the machines, and were extracting as much data from the researchers as they were providing. It was apparent that a new sovereign state would soon be joining the Galactic Federation!

By now a steady flow of equipment was arriving in the Gamma Sculptoris system, and heavy-duty submarine gear made more effective study of the sea's mysterious lower levels possible. The first few excursions into the murky waters produced no sightings of the large creatures the Aquaticans insisted inhabited the depths, but sensor equipment aboard detected the movements of several huge entities in the distant gloom. They were definitely mobile objects, and attempts were made to catch up with the gigantic creatures, but without success, as they were able to move through the darkness much faster than the most powerful submarine stationed on the planet.

A strange pyramid

It was during one of these chases that the crew of a submarine stumbled across a further, extraordinary reminder that there had once been another intelligent species on this world. Their sensors registered the presence of a large, regularly shaped body in the darkness nearby, and assuming momentarily that it was one of the creatures they had been

pursuing, they altered course towards it. As they closed with it, a brilliant beam of light suddenly blazed into existence and, startled, they hurled the clumsy craft away from its source. Seconds later the light was extinguished and they made another cautious approach. The same phenomenon repeated itself, but this time they slowed and continued towards the point where the beam originated. There, rising from the murky depths, was a massive stone pyramid, one surface engraved with a huge eye-shaped image from which the intense beam of light emanated.

A concentrated effort was made to establish the nature and purpose of this eerie monument to a long dead civilization, but the efforts of the teams failed to provide any concrete answers. Obviously triggered by the presence of large objects, it probably served as a beacon of some kind, but how it draws its power, or whether it originally stood above sea level are questions that have not yet been resolved. Whatever the answers, there can be no doubt that the vanished people who constructed this monolithic object certainly built it to last!

Underwater attack

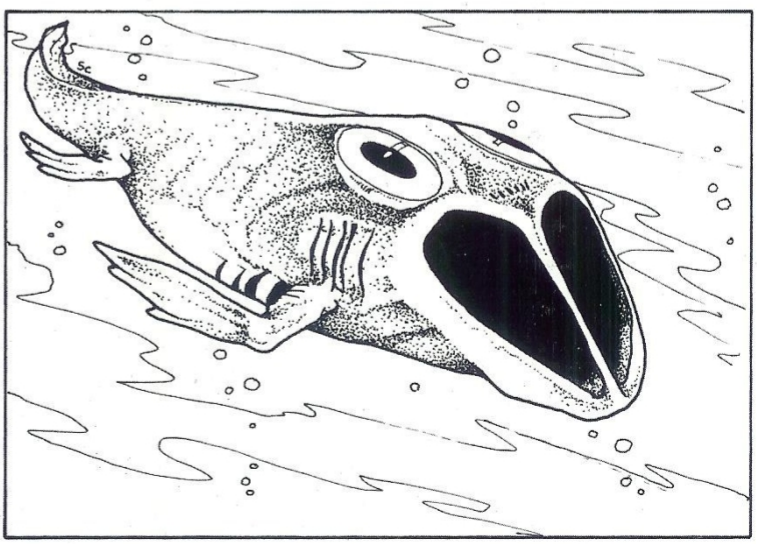
Meanwhile explorations to identify the giant denizens of the deep continued, but the task was beginning to seem a fruitless one. Then one day tragedy struck. Both the submarines with which the research teams were equipped were attempting to co-operate in cornering one of the creatures when their prey swung in an arc and began closing with them at an incredible speed. Suddenly, out of the darkness, a vast and monstrous shape swept towards the nearest vessel. Huge, pulpy mandibles beneath a pair of pale eyes, each as large as the research units floating on the surface above, grasped the sub and crushed it in a cavernous mouth. The remaining vessel hurled itself towards the surface under every pound of thrust it could muster, but the monster made no attempt to follow.

It was some time before any further attempt was made to study these fearsome creatures, but eventually, once specialized high-speed military pursuit subs were seconded to the base, it was possible to approach them without risking the unpleasant fate of the study center's first casualties. It is ironic that these awesome deep-water creatures are in fact relatively harmless, feeding as they do on the thick rafts of plankton which infest the seas. In fact the wreckage of the lost submarine was later found on the ocean bed among the decayed remains of the creature which had attacked it in an attempt to deter its pursuers. Ill-equipped to ingest the twisted fragments of the vessel's hull, it had died with the remains of the ship lodged in its jaw.

The long search for the giant creatures supposed to inhabit the deep ocean levels ended with disaster when one of the research subs was attacked and destroyed by what was later discovered to be a normally non-aggressive species.

Although Aquatica is listed as a Federal Research area, access is not restricted provided private space craft notify the authorities of their intentions before approaching the planet's surface. In any case, it is inadvisable to attempt a landing elsewhere but on Federal sites even with specialized gear as there are still many questions about this remarkable world which are still unanswered.

The Common Vacuum Fish.



Matar IV

TYPE OF SUN: Eta Pegasi Class G2 yellow giant. Magnitude —0.2.

POSITION: Northern hemisphere—Pegasus. Beacon code NPEG 32.

DISTANCE FROM EARTH: 230 light years.

TYPE OF PLANET: *Class B4. Escape velocity 7.9 M.P.S. Federation catalogue no. 1B 2909. Sovereign World with provisional Federation status. Landing technically unrestricted but subject to inconsistant local conditions. Visitors should report to orbital substation before making landfall.*

The ponderous dominant species of Matar IV is a wholly unpredictable creature, and it is best to avoid any unnecessary contact. Although frequently generous in their dealings with off-worlders, they are as likely to erupt into an unprovoked rage.

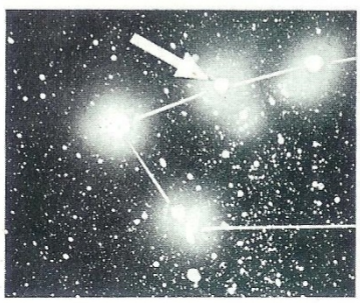
The haunting beauty of Matar IV has been the focal point of romantic space-mariners tales since the ships of men first probed into the unknown regions of what is now the perimeter of Federation space. Originally named Eden by the early explorers and prospectors, this magical, tropical world swings through the vacuum as one of Matar's four-planet system, but is the only one on which life has been identified. Its orbit is shielded by a dense belt of pulverized rock believed to be the remains of an ancient collision of worlds, and which forms a semi-transparent shell around the giant sun. This very broad band of material is responsible for the hot, humid climate of Matar IV as it reflects the sun's heat and light onto the surface, and it is dangerous for vessels to attempt to penetrate the irregularly moving debris instead of passing over its outer edges.

At first sight, this magical planet is a superb green-blue orb moving against a backdrop of distant, gleaming particles, with its sunward side a brilliant emerald and the other a slightly darker olive green. The light reflected by the asteroids means that Matar IV never has a true night, except for a brief period in its 427 Terran day year when it overtakes an area where the belt is much thinner.

Rulers of Eden

Only one dominant species inhabits the surface, despite the myths perpetuated by the early spacers who recounted tales of exquisite, winged creatures like angels, living deep in the dense jungles. The real rulers of Eden are quite unlike these legendary descriptions and could by no means be described as delicate or angelic in their appearance. Instead they average four metres in height and weigh in at little under half an Earth ton. Possibly the most accurate description is that they resemble huge clay statues that someone became tired of making!

Eta Pegasi.



These rather forbidding creatures are a curious blend of gentleness and lethal irascibility, and their behaviour is completely unpredictable. They do not seem to resent the arrival of off-world ships on their planet, although incidents have been reported of their destruction of visiting ships for no apparent reason. Visitors are therefore advised to avoid all unnecessary contact with them. Although provisional Federated status has been awarded, it is a somewhat academic gesture that is really an attempt to formalize the legal status of its chief export.

Matar IV is the only known source in the entire galaxy of Diospyros Plastikos, a unique form of ebony which is pliant and malleable in its natural state, but which cures to a black, steely finish much favoured by architects, designers and furniture makers producing luxury goods. Attempts to reproduce its properties in synthetics have so far failed to duplicate its admirable texture and satiny finish.

The subject of many early myths, this winged humanoid is actually a ruthless carnivore whose shrill hunting cry has chilled the blood of anyone who has seen the effects of its lethal talons.

The Matans ask nothing in exchange for permitting the export of this prized commodity, but their complacency cannot be relied upon as they are liable, without warning, to turn on those harvesting the valuable timber—often with dire results. As a result, the off-world merchants and shippers usually choose to set down in the more remote areas of the planet, and this practice led to the identification of the source of the legends surrounding this fabled world.

Angelic predators

Dwelling deep within the thick, tangled forests are the members of another genus which, when seen, do much to explain the wonderment of the early spacers, as their slender bodies are strikingly humanoid. Except, that is, for the majestic wings which extend from their dorsal muscles. Appealing though these fantastic creatures may seem to be, they are also to be avoided as they are, in fact, predators regarding Man as just another source of food. Incapable of true flight, they glide down from the foliage where they rest, and rake their victims with the vicious talons extending from their limbs. The shrill shriek they emit to terrify their prey into immobility is the substance of nightmares, and is not easily forgotten by those who have heard it.

Hades

TYPE OF SUN: 21 Lyncis Class AO hydrogen star. Magnitude 0.0.

POSITION: Northern hemisphere—Lynx. Beacon code NLYN 76.

DISTANCE FROM EARTH: 250 light years.

TYPE OF PLANET: *Class A4. Escape velocity 6.4 M.P.S. Federation catalogue no. 1B 3253. Independent World. Relations with this planet are unstable and surface conditions can be dangerous. Federation members should remember that Galactic law does not obtain in this region and landfall is made at the operator's own risk.*

At the very edge of the sphere of Federation influence lie the planets known as the Perimeter Worlds.

Many of these planets have been registered and charted but have yet to be explored, and although the Federation's craft are constantly probing the endless sea of darkness beyond, our knowledge of wide areas of space is still incomplete.

There is a backlog of planets awaiting thorough study, some having been subjected to no more than a cursory orbital survey or, at best, a few surface excursions by the crews of Pathfinder ships equipped with limited resources and expertize. Many are incapable of supporting life but, occasionally, planetary bodies where life exists, are reported. These are usually filed for investigation when time and facilities permit, subject to the varieties of organism detected. The discovery of intelligent lifeforms is as infrequent as one might expect, but any such case is always awarded a priority follow-up rating, and the most recent world to be treated in this way is the sinister planet of Hades.

Hades' elevation to the top of the priority list came about almost by accident. A survey vessel operating in the area registered its presence and established a high orbit in order to take the usual albedo and spectrometer readings before swinging round its sun on the homeward journey. The thick cloud cover obscuring the surface apparently hid a Class A world, and it is standard procedure that all planets displaying Earth-type characteristics should be subjected to a surface investigation as potential colonial sites.

Lost without trace

The last signal received was that the craft had made landfall and a scout party was conducting an initial foray into the forests which blanketed the greater part of the surface. That was the last heard of the entire crew and their vessel.

The abrupt loss of contact resulted in the immediate dispatch of an armed security craft with a scientific detachment aboard, which arrived in orbit scarcely two weeks later.

The sinister and extremely dangerous Fangstones inhabit a cruel and hostile world, attracting their prey by emitting sensory signals in simple telepathic form.

They soon located the first ship which was undamaged, but there was no sign of either the patrol or the crew that remained aboard. Before setting up base, the security ship conducted an exhaustive low-orbit scan, and although identifying a wide variety of fauna, failed to spot any indication of an organized species.

The Captain decided not to call for support, and set down to establish a surface base. Within hours of a party leaving the ship to conduct an area sweep, the craft was airborne again, but minus all but one of the search party. There was, after all, a sentient being inhabiting this vapour-shrouded globe, and one which was not prepared to regard Man as a welcome guest. A full-scale operation was mounted to seek out and make contact with the representatives of the native race, and before long an Alien Contact Team, with extensive Terran Defence Authority support, was setting up camp near the clearing where the first, empty ship lay.

Telepathic duo

As the reports came in, the picture formed of a strange and malevolent intelligence inhabiting a particularly hostile environment, where there were few established food chains and predator could

A hostile world by any standards, every life-form on Hades should be regarded as dangerous, as most creatures there regard anything that moves as potential prey.

become the prey of its intended victim by a simple misjudgement of relative strengths.

Only one creature was outside this terrifying disorder, and was dubbed Fangstone by the men who first stumbled across this terrible armoured being during one of the preliminary patrols.

They had entered a clearing to find a number of evil-looking, cat-like animals sitting motionless and staring balefully at the party. As the latter approached, each member of the group felt an insistent urge to touch the beasts and moved slowly towards them. But as they approached, the animals rose, and without shifting their gaze, edged backwards towards a jumble of rocks that skirted the glade. The men followed, entranced, until they had reached the boulders. Suddenly a horrendous shriek froze them to the ground and two of the "stones" thrust at the figures nearest to them, huge fangs suddenly appearing which tore at the flailing bodies as the crimson cat-things leapt to join the ghastly feast. Thus the fate of previous parties was discovered, and the greatest danger identified.

The terrifying Fangstones are incapable of rapid movement, and in a world of swift and extremely efficient killers and very few harmless prey, are entirely dependent on the "cats" to supply their victims. They achieve this by exerting a form of telepathic control

The only creature safe from the voracious appetite of the Fangstones are these equally dangerous cat-like animals. Their hunting relationship with the former have led to the deaths of several off-world visitors.

which is relayed via the "cats" to the intended victim. The "cats" themselves do not appear capable of this feat when isolated from the Fangstones and only act as transducers, converting the signals from the latter into a hypersonic signal which stimulates the brain's pleasure center.

Efforts to communicate with the Fangstones are so far unsuccessful, and it will be a long time before this dangerous world is safe to visit.

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ALIENS IN SPACE

An illustrated guide
to the inhabited Galaxy

Steven Caldwell

One of the more significant developments in human history, and without doubt the most dramatic in terms of the mobility of the species, was the introduction of the first Hyperdrive engine by Henri DeVass in 2027 AD. Within a short space of time this device had transformed Man's attempts to explore his extraterrestrial environment, and the doorway to the stars was open.

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Aliens in Space is a fascinating account of the worlds within the Galactic Federation where sentient beings exist, and describes the characters, cultures and circumstances of an extraordinary variety of creatures, from the gentle and sophisticated Alpha Centaurians to the terrible Fangstones of Hades. Each section opens with a planetary data check and navigational reference, before going on to outline the planet and some of the intriguing life-forms to be found there.

Steven Caldwell joined the Galactic Federation Security Force in 2393, and quickly rose to the rank of Group 1 Battleforce Commander. During his 15 years of active service he travelled to all parts of the Federation, and was awarded the Andromeda Star for his part in the settlement of the Perimeter Worlds.

He now runs his own company prospecting for the ore *zyrillium* – the major propulsive fuel for Interstellar Military Interceptors.

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